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## **Play, narrative and learning in education: a biocultural perspective**

### **Abstract**

A substantial body of research suggests that both teachers and students frequently find teaching and learning within the confines of the English National Curriculum a frustrating and alienating experience (Wood 2004). Interviews were undertaken in five English secondary schools to explore aspects of both teacher and student constructions of the teaching and learning process. The resulting thematically analysed data supported Wood's (2004, p.371) proposals of 'impoverished' learning. It is subsequently proposed that if we view human beings as 'storying animals' (Lyle 2000, p.55) making sense of their world through cohesive narratives within Wittgensteinian 'language games' (Wittgenstein 1953) via collaborative play and discovery activities, we can more readily define problems emerging from heavy reliance upon 'transmission' teaching practices resulting from the demands of the English National Curriculum. It is proposed that such a pedagogy does not adequately recognise human primate styles of learning, in particular the need for to-be-learned material to be embedded within cohesive narratives.

### **Introduction: play, narrative and 'language games' in education**

The Education Act (1988) introduced a content-driven National Curriculum which 'came into force to offer the same education for all children in England' (Brock 2008, p.80). Wood (2004, p.361) proposed that subsequently, successive English governments used this imposed curriculum to operate a 'radical modernising agenda' which introduced notions of central government 'command and control' to induce learner 'performativity'. Over the past twenty years, similar curricula have also been imposed elsewhere in the western, and notably, English-speaking world; for example, Henley et al (2007, p.56) referred to US educators 'squeezing every minute of the school day to meet the mandates of the No Child Left Behind Act'. Increasing numbers of education researchers have subsequently reflected upon 'increasing alienation' amongst learners, and a consequent need to create 'authentic learning communities' (Larrivee 2000, p.293).

This paper takes a biocultural perspective to reflect upon this topic, raising the specific possibility that current English education practices may be poorly matched to human primate styles of learning; in particular that contemporary English modes of teaching may not adequately recognise the need for to-be-learned material to be presented within narratives that make cohesive sense to the learner. The author initially developed the developmental biocultural perspective in an extended piece of research carried out to investigate the learning that children accomplish in outdoor free play activities (Jarvis 2007a, 2007b). Within this longitudinal, ethnographic study it was found that children aged between four and six co-created a variety of narratives to ‘script’ their free play within their school playground, and in so doing, engaged in a rich learning experience involving simultaneous competition and collaboration, developing complex gendered interaction skills. The activities the children undertook mirrored many of the physical play styles of earlier primate species, but they used cohesive, culturally relevant narratives to make uniquely human sense of the activities in which they engaged. The biocultural perspective synthesises aspects of evolved human primate biopsychology with the products of human language and culture in its endeavours to understand human behaviour and cognition; ‘[the] biocultural model reflects a confluence between innate and learned influences’ (Mallon & Stich 2000, p.143).

Harré & Tisaw (2005) outlined the psychological relevance of Wittgensteinian philosophy, which posits an intriguing model of the highly linguistic human being in the assertion that language is, at root, a type of human ‘extension’ behaviour. As such, Wittgenstein (1953) proposed, human beings express their internal states through ‘language games’ initially learned over the developmental period and refined throughout the lifespan. This hugely extends human modes of communication beyond the cries, grunts, postures and facial expressions used by non-human animals. ‘Wittgenstein suggests that language gets a footing in the subjective domain of individual experiences by the substitution [of cries and grunts] by which we display ‘how it is with us’ in public’ (Harré & Tisaw 2005, p.186).

Clearly, deeply symbolic human language is a far richer form of expression than the grunts and cries of non-human animals, and as such, is one of the principal defining qualities of human beings as a species. Bruner (1990, p.69) proposed that human beings are creatures who evolved to critically rely upon sharing symbolic meanings to operate within their world, proposing that symbolic meaning ‘depends upon the human capacity to internalise language and use its system of signs..... such a social meaning readiness is a product of our evolutionary past’. The role of human language, its emergent property of ‘narrative’ and the consequently complex ways in which people understand their world have been a source of fascination for many researchers. Hervern (2003, p.1) referred to human beings dealing with every aspect of their experience through the construction of shared stories (or ‘narratives’) and Klein (2000, p.480) stressed that the principal emphasis in any study of human beings should be upon ‘our species-specific ability of abstract thinking’, combining symbols in both internal and shared narratives. Bruner (1986) considered the way that human beings understand many, sometimes overtly similar aspects of their world very differently, depending on the narratives that they attach to them. ‘Isn’t it strange how this castle (Kronberg) changes as soon as one imagines Hamlet lived here?’ (Bruner 1986, p.45). He considered this as an example, reflecting on ‘possible castles’, highlighting the ways that human beings create ‘products of the mind’ and ‘build them into a corpus of a culture’, concluding: ‘it is far more important for appreciating the human condition to understand the ways human beings construct their worlds (and their castles) than it is to establish the ontological status of the products of these processes’ (Bruner 1986, pp.45-46). Harré (2002) made a similar point, comparing Snow White’s magic mirror and Maui’s magic fish-hook to the ‘magic’ credit card he carries around in his pocket, and the bank note that is really a valueless piece of paper containing a written promise. ‘Material things have magic powers only in the contexts of which they are embedded’ (Harré 2002, p.25). In the same vein as Bruner, Harré evoked the concept of a bridge and considered how this might change in the mind, depending on whether, for example, it is a bridge over the Seine or the bridge over the River Kwai: ‘if material things become social objects in so far as they are embedded in narratives, then the question of whether this is the same or a different social object depends on whether or how this is the same or a different story’ (Harré 2002, p.30). The

ultimate proposal that the construction of narrative is the *only* way that human beings can give true meaning to the objects and events in their world was outlined by Polkinghorne (1988); Hutt, Tyler, Hutt and Christopherson (1989) proposed that such meaning created by children within their 'ludic' or 'creative' play is the key to deeper levels of cognition, thence learning.

A developmental thread, investigating the role of narrative in human maturation and learning has been created by several researchers, principally Bruner, who emphasised the central role that narrative comprehension plays in human experience in his postulation that it is 'among the earliest powers of mind to appear in the young child and among the most widely used forms of organising human experience' (Bruner 1991, p.9). Lyle (2000, p.45) proposed 'narrative understanding is a concept of growing importance in discussion of how children learn'. She described human beings as a 'storying animal', making sense of thoughts and events via stories and narratives, meaning that human beings live in 'a largely story shaped world' (Lyle 2000, p.55). As Friedman Hansen (1982, p.190) proposed, for such a storying animal, 'learning cannot be understood in isolation from the dense network of cultural information in which it is embedded'. It can therefore be proposed that a human being is unlikely to make sense of a concept or idea unless s/he is able to make sense of the narrative in which it is presented. Wittgenstein (1977) posited the example of the impossibility of someone with normal colour vision trying to explain the concepts of 'red' and 'green' to a colour blind person: 'the colour blind seem to be playing a different language game, or cannot participate fully in our language game' (Harré & Tisaw 2005, p. 272).

The biocultural nature of such a situation is clear- it is biology that has created the difference in visual calibration, but the communication problems for the individuals concerned arise within the 'language game' that is immersed in culture and shared narrative. While there is no permanent underlying biological difference between human beings from different generations, the narrative 'matching' process that occurs when an adult attempts to transmit an idea to a much younger person will be inevitably fraught with potential problems based both on the difference in life experience and knowledge of

the world, and, in a postmodern technological society, generational differences. The childhood of the present is immersed in a very different technological environment to the childhood of the past; this has a huge impact upon how the individual concerned perceives his/ her 'everyday' modes of living, particularly with regard to communication. Prensky (2001), referring to the huge steps made in information technology over the past thirty years, consequently referred to the generation born post-1990 as 'digital natives' and adults born pre-1980 as 'digital immigrants'.

Asymmetrical interactions based on solely linguistic transmission from adult to child can consequently be viewed as potentially at risk of creating a situation that mirrors the one described between the colour blind and colour seeing individual above, where the narrative may ultimately not be effectively shared, and the meaning largely lost due to the differences between the narrative worlds inhabited, hence the 'language games' used by the interaction partners. Narratives that are built between peers in independent interaction, however, are far more likely to naturally involve 'language games' that emerge from existing narratives that both contributors more effectively share, and consequently find relevant, hence potentially interesting and enjoyable. For children, such interactions largely occur within collaborative play events, which can be pedagogically harnessed by teachers in the technique of 'discovery learning', 'an approach to instruction through which students interact with their environment by exploring and manipulating objects, wrestling with questions and controversies, or performing experiments' (Ormrod, 1995, p. 442).

Adult teachers thus have a difficult role to play, in that if new to-be-learned material is not effectively brought inside a 'language game' that can be readily accessed by the learner, it is unlikely to be effectively inculcated. The most that could be achieved within such a mismatch would be for the learner to learn some aspects of the material in a 'rote' fashion, which is soon lost from the thinking processes of a creature evolved to think and learn in cohesive narratives: Lyle's (2000) 'storying animal'. A teacher's ongoing role is therefore largely:

...to think about not only the child and his or her current activities, but also about the child's history of previous experiences, the cultural backdrop and meaning that such activities have for the child, the social context in which that particular activity occurs in the classroom, the structure of the larger classroom context and the opportunities afforded by the available tools and cultural artifacts to be found there.

Winsler 2003, p.253

Within this analysis, it is clearly crucial to the learning process to provide learners with opportunities to practice and play with to-be-learned concepts and ideas with peers, who most closely share an individual's 'language games' and narratives. Claxton (1997) proposed in his book 'Hare Brain, Tortoise Mind' that adults also produce more original and insightful solutions to work-based problems when they are encouraged to play creatively with ideas, particularly in groups. Claxton reflected: 'The slow ways of knowing will not deliver their delicate produce when the mind is in a hurry... people need to know how to make use of slow knowing.... this..... must surely be the true function of education' (p.214-215). But does the current English education process allow children sufficient experience of such play within 'discovery learning' activities?

### **The Problematic nature of the English National Curriculum**

Santer, Griffiths & Goodsall's (2007) review of the literature relating to children's play opportunities in England proposed that the time consumed by direct curriculum delivery within the formal education process left little time, either outside or inside the classroom, for children to develop original, independent and peer co-constructed cognitions. A specific classroom practice concern was raised by Reay & Williams (1999), who proposed that the emphasis on testing individual performance against narrowly defined targets at seven, eleven and fourteen years of age had the cumulative result that many creative and collaborative activities that had previously been part of day-to-day classroom practice in English schools were quashed in favour of "spoon feeding" an

individually learned, individual outcome-focused curriculum, in order for children to perform at the maximum possible level in predictable questions within key stage tests; as Bishop & Curtis (2001, p. 34) reflected, ‘children nowadays live in a landscape where clearly defined paths of development, laid down by adults carve up the terrain’.

So what is the impact of such policies upon the culture of the English classroom?

McNess, Broadfoot & Osborn (2003) carried out a comparison of teacher reflections on education policy in England, France and Denmark. They found that while the French and Danish teachers worked reasonably comfortably within the culture of education in their respective nations, the English teachers felt that there was a clear ‘disjunction’ between English education policy and what they perceived as best practice. These authors concluded that within English education ‘a growing policy emphasis on accountability, and the need to raise school standards.... [resulted in]... a performance oriented, transmission model of learning [being] given preference over a socio-cultural model which recognised and included the emotional and social aspect’ (pp. 245-246).

It is very disappointing that English education practices have ventured so far along this road, given that over twenty years ago, anthropologists were already discussing the need for ‘an anthropological approach [within education], that emphasizes the socially organized nature of learning’ (Lave 1982, p.187). Singer (1999) proposed that modern social policy construction may be carried out with a far too narrow frame of reference, political philosophers working out what human beings ‘should’ be like on the basis of abstract politico-ideological principles, becoming puzzled and angry when applications prove problematic. Singer’s proposed solution is that attempts to reshape any aspect of society would be much better undertaken with a basic plan of the natural psychology and evolved behaviour of human beings modifying political ideology accordingly, rather than vice versa, which, he reflected, tends to be our current way of creating social policy.

This paper suggests that it is time for policy makers to grasp the biocultural model of the human being as a creature whose evolved capacity for understanding is encompassed within culturally-mediated narratives and communicated by ‘language games’. Play and



discovery-based interactions involving narrative co-construction with peers are therefore crucially important for the inculcation of such understanding, particularly within the developmental period. The cumulative results of insufficient time allocated for such interactions are illustrated by the student and teacher interview data presented below, which explored the views of young people who had already completed at least six years of education under the English National Curriculum, and the reflections of some of their teachers.

### **The research: education without play and narrative?**

#### **Introduction**

The research was undertaken within a range of student and teacher ‘voice’ research initiatives within five English secondary schools carried out between 2005 and 2006. Researcher focus upon student ‘voice’ within education has emerged within a democratising agenda (Fielding & Ruddick 2002). The research outlined within this paper additionally considered teachers’ orientations to their teaching practice within an externally imposed curriculum; this aspect of the investigation was therefore undertaken within a similarly democratic perspective. While the core focus of these research initiatives was not specifically the role of play and narrative in learning, many of the responses from both teachers and students touched upon this, and this paper brings these threads together in the analysis below.

In all, 28 teachers were interviewed about aspects of the ‘reflective’ practice that they undertook with regard to their teaching. The sample was professionally diverse, ranging from trainees in initial teacher training to department heads with 20+ years experience. The student sample contained 76 young people of both genders aged between eleven and fifteen, who had experienced teaching and learning under the regime of the English National Curriculum for at least seven years, including six years of primary education.

Both participant groups were from a wide range of ethnic groups and socio-economic backgrounds, although there was a preponderance of those who were white and broadly middle class, particularly within the teacher sample.

The teacher data are drawn principally from individual interviews, and one focus group of ten trainee teachers in initial teacher training who were asked to reflect upon their practice within their final work placement; the pupil data are drawn from focus group initiatives. There were typically eight students, four of each gender within each of these focus groups. All interviews were recorded on a dictaphone and subsequently transcribed in full. The standard ethical procedures were followed within this research, including the acquisition of parental consent for the sample of young people prior to the commencement of the interview schedule. All the data used within this report have been anonymised so that contributors cannot be identified.

The teachers were asked to discuss reflections upon their teaching practice with the researcher, with a view to sharing some of the reflections and analyses that they had undertaken relating to their professional experiences, initially so that the contents of the reflections of experienced teachers (experts) could be compared with reflections undertaken by those in their first two years of teaching (novices). The students were asked to collectively reflect within their focus groups upon their views of what constituted 'good' and 'not so good' school-based learning experiences. The data were consequently thematically analysed; in the case of the teachers, the themes were initially collated to consider potential similarities and differences between the reflections of 'experts' and 'novices'. In the case of the students, the themes were initially created on the basis of what aspects of their lessons they perceived as 'good' and 'not so good'. A clear theme relating to narrative, meaning and the role of 'play' activity in learning emerged from most of the teacher interviews and student participant groups. There was no clear difference in this content on the basis of teacher experience (although some 'novice' teachers did appear to undertake 'shallower' reflection than their more experienced colleagues, see below). Desire for narrative-based meaning linked to play-oriented experience in learning was a strong theme within the student focus groups,

which did not appear to differ substantially with regard to the age/ attainment level of the students. The contents of this ‘play, narrative and learning’ theme have been summarised below.

### **The student interviews**

The overwhelming content of the student ‘voice’ was a general perception that school-based activities were essentially artificial and alienating, particularly those set in preparation for tests, which took up a lot of teaching time, and, in the words of one participant, were ‘*pointless and repetitive*’. Even when students were set short collective tasks in groupwork, the culture of the contemporary classroom appeared to dictate that the entire goal was perceived by the students concerned as to individually reach a particular set answer, target or standard. The consequent result was outlined by one student, that the ‘*not so clever*’ [relied] ‘*on the brainy person to do it for them*’; in this sense, transposing the ‘brainy person’ with the teacher, rather than joining together within a collective ‘discovery’ experience. There appeared to be no culture of attempting to play with ideas, and in so doing, construct original and/ or exploratory shared narratives. Homework or tests set on topics where ‘the answers’ had not been previously directly communicated by the teacher in the classroom were unanimously perceived as extremely unfair by a focus group of eleven year olds. When the researcher asked ‘aren’t you sometimes asked to read something, think about it and come to your own point of view on what you have read?’, one student doggedly insisted: ‘*if the teacher hasn’t taught it, it shouldn’t be on the test*’, an opinion that was clearly shared by others within this group. These findings give a key insight into the way that concepts of teaching and learning were represented within the ‘language game’ of the participants concerned- principally as the transmission of disembedded knowledge for use in a superficial memorisation exercise, which, it can be proposed, does not only reflect the culture of the secondary schools that they were currently attending, but the primary schools in which the ‘language games’ used within formal teaching and learning interactions had initially been inculcated.

The main purpose of writing was seen across the board by eleven and twelve year old participants as *'to revise for your tests'*, and many participants went on to reflect that 'writing' and 'fun' were polar opposites in their estimation, mirroring Harris & Hadyn's (2006, p.325) finding that 'the most frequently mentioned least popular activities were written work'. One participant summed up the typical orientation by proposing that she preferred *'fun lessons, not just doing written work'*. While many of the participants proposed that the reading that they were required to do at school was dull, difficult and boring, they also reported prolific out-of-school engagement with social multi-media activities requiring competency in literacy-based communication skills, particularly MSN conferencing and texting. Many of the sample were also keen readers of magazines, comics and horror novels. One fourteen year old girl smiled at the researcher's question about how 'school' reading could be made more interesting and softly commented *'but really, it's just education in the end, isn't it?'* This gives a very worrying illustration of a chasm between the 'language games' used by the school and those used by its students. It is suggested that students' unwillingness to engage in school-based reading and writing activities- i.e., to engage with those artefacts that directly carry the narratives of the educator- is an indication of student alienation from the process of learning.

Participants from all year groups reported enjoying learning 'games', particularly those accessed through 'Smartboard' technology, endorsed by one thirteen year old participant as *'a fun, fun way to learn'*. This particular focus group were very keen to use information technology more frequently in lessons, although they realised that access was sometimes limited due to availability. Reflecting Prensky's (2001) point about generational 'digital natives and digital immigrants', they were scornful about their school's 'cyber-sitter', proposing that this was easy to circumnavigate, reflecting that they had sometimes shown teachers how to do this. One participant proposed that sometimes teachers could limit students' uses of IT even when equipment was freely available because *'some of them don't want to leave their comfort zone'*, which triggered general laughter amongst the group.

There were some indications of innovative individual teacher attempts to engage with the narratives of their students, particularly where remedial intervention was provided. One fourteen year old, whose main leisure activities revolved around 'War Hammer' comics and games, commented that while he generally had a problem retaining the content of the material he read at school '*it don't stay in*', he remembered a remedial teaching and learning strategy that '*was like a board game within a book*', where the reader rolled a die and, depending on the number scored, the characters in the book, which was based on a science fantasy world adventure, moved on to different outcomes. He proposed that this had greatly improved his overall literacy and meaning-retention skills, as he became intrigued with the narrative of the story through his engagement with the game. It could be asked why such an attempt to connect with this learner's narratives had only been attempted within a remedial context; however the points made about the experience of delivering the National Curriculum in the teacher interviews (below) can shed some light on this question.

Qualities of 'liked' and 'disliked' teachers could also be seen to relate to the level to which they were able to share their learners' 'language games', with a fourteen year old participant proposing that disliked teachers '*focus upon what they are interested in rather than what they think the pupils might be interested in*'. This is a good point at which to turn to the teacher interviews, which raise the question of whether it is likely that individual teachers freely choose to present concepts on the basis of what they are interested in, thereby failing to work within the 'language games' of the learners, or whether this situation is driven to a great extent by the culture of the National Curriculum and its associated testing and inspection regime. If (as this paper proposes) the latter is the case, it must be noted that a considerable amount of experience, expertise and confidence will be required on the part of the teacher to effectively negotiate the complexity of the necessary three-way mediation between the 'language games' of such a monolithic curriculum, those of the teacher him/ herself and those of the young learner.

## The teacher interviews

“I think there is far more concern with the *skills* that are required to do well in SATs (Standard Assessment Tasks), which is nothing to do with reading for pleasure, and English teaching has changed hugely.... I hate it; I think it is absolutely awful, I think it is one of the worst things that has happened to English teaching since I have been a teacher.... Pleasure in literature just being completely discounted... with very detrimental effects on the love of reading”.

*English teacher with 20+ years of teaching experience*

Within these few lines, this teacher outlines many of the key challenges that the majority of the teacher participants described within their contemporary teaching experiences, attempting to communicate a set of technical skills to their learners, at a pace that did not allow for sufficient development of a surrounding cohesive narrative, in which both teachers and students negotiate meanings through a range of play-based discovery activities.

Other researchers have made similar findings:

A recent *Guardian* column....illustrate[s] the impact of a school system focused on the attainment of targets rather than the development of thinking:

*“a history teacher, in an apparently excellent state school ... finished teaching his 14 year-olds about the first world war on a Tuesday. The following Thursday the class began studying the rise of Nazi Germany, 1933-39. After 20 minutes one child put her hand up to ask what had happened between 1918 and 1933. ‘We really don’t have the time to go into that now,’ the teacher said. So they never did.”*

....Since its introduction in 1988 the English National Curriculum has robbed secondary schools of the time and space, and threatened the profession's capacity, to engage and develop learners' appetites for questioning the "why" of things.

Rayment (2008, p.1)

Fisher (2007, p.109) describes one of her teacher participants complaining about a similar '*learn it, forget it*' culture in sixth form education, and another proposing that one result of this is '*one of the drawbacks is the reading. Students don't, can't read anymore*'.

While this is also abundantly clear from my own interview data gathered with slightly younger students, a response to this point, from a biocultural perspective is that as 'storying animals', why would any of these young people choose to engage with literacy-based education processes, if the reading they are set does not communicate cohesive narratives- as demonstrated by the example of the history curriculum cited above?

Within the interviews carried out by the author, similar reflections were raised by teachers at all stages of their career, some demonstrating their implicit understanding of the need to share meaningful narratives with their learners against National Curriculum odds, through relevant, play-based activities:

"Football chanting, movement, doing stuff rather than sitting on a chair listening and writing and copying off the board whatever it is.... ... you can't do it all the time, because they just get bored". *Modern Foreign Languages teacher with 20+ years of experience*

"I just think at the end of the day you have got to know your groups and tailor things as much as you can towards them". *Trainee English teacher at the end of her initial teacher training year*

However, many also voiced the associated problems in managing to develop cohesive narratives through play and discovery-based activities within a ‘treadmill’ of continual fact transmission:

“We’re so tied to the syllabus.... we don’t have a lot of time to... explore different approaches..... A lot of it is, sort of, they need to know this, they need to know that, they need to know the other and it’s.... we’re on a sort of treadmill really... I think that I think, that there is perhaps too much of a straight-jacket at the moment with the National Curriculum, and... I’m always thinking ahead with the kind of children that we want in society, you know, i.e., that they are independent learners, they can do things for themselves”. *History teacher with 20+ years of experience*

Some of the trainee teachers found it difficult to find their feet in such an environment. Several participants within the trainee teacher focus group had lighted upon the ‘pace’ related idea that, rather than being given time to explore meaning within cohesive and meaningful narratives relating to the subject and topic concerned, children needed to be continually active in order to deflect poor behaviour:

“I’ve tried very much to try and get it going, you know even to the point of you know, setting them a task before I do the register, or, you know, they come straight in and they are straight down, we don’t give them the chance just to become detached from what you are trying to do.... As soon as they stop, you know, it only takes thirty seconds because you will then start drifting off.... Don’t give them the two minutes breathing space that the register takes”. *Trainee Science teacher at the end of his initial teacher training year*

It is interesting to reflect that this participant referred to his students ‘becoming detached from what *you* (not *they*) are trying to do’, and the problem of ‘you’ (not them) ‘drifting off’, which gives a clear indication of whose narrative is perceived as the primary concern within this teaching and learning relationship. It is suggested that this orientation



is underpinned by the disregard of the role of cohesive narrative, play and discovery in learning within the fact transmission culture of the relevant curriculum, and the resulting problematic 'community of practice' (Wenger 1998) that has consequently arisen.

### **Conclusion: towards more relevant practice?**

It is proposed that the natural mode of human learning is through shared narratives, expressed in 'language games' that make cultural sense to the learner, given our evolutionary background as essentially a 'storying animal'. As such, powerful learning events occur for learners of all ages within collaborative play and discovery activities where they can explore the to-be-learned material within 'language games' shared with the peers who most closely share their cultural world, most effectively enmeshing the concepts within each learner's existing narrative-based cognition. However, this mode of learning is poorly supported by English education practices within the current National Curriculum-driven framework. As Singer (1999) suggested, rather than responding to issues arising by continually imposing politically-driven targets, the contemporary English government should first seek a basic plan of natural human psychology and evolved behaviour to underpin a core pedagogical ideology.

Human beings have evolved to be creatures that are distinguished from the rest of the animal kingdom by our ability to solve novel problems within highly collaborative social environments, using a huge individual and collective capacity for shared symbolic meaning and cognitive flexibility. We are also able to pass on such knowledge from generation to generation via complex symbolic mechanisms used in both spoken and written language, allowing the sum of human achievement to become cumulative across generations; in the classical quote that derives from Greek and Latin scholars, to 'stand upon the shoulders of giants'. When it is considered that some human cultures now attempt to school their young in education regimes which reify the transmission of disjointed 'chunks' of knowledge towards performativity in highly artificial, predictable test situations, it can be suggested that too much emphasis has been given to disjointed, rote communication of stored bodies of knowledge, and, in agreement with Wood (2004),

that such educational policies do not derive from pedagogical knowledge, but from a politically driven agenda; one that does not properly recognise flexible problem solving experiences and associated peer interaction as vital complimentary factors underpinning the full development of human beings' evolved human cognition capacities.

Bruner (1976, p. 56) proposed that development which is separated from a natural social environment 'provides no guide, only knowledge... These are the conditions for alienation and confusion'. This paper proposes that this is currently a key problem within contemporary English pedagogy, where the central role of play, narrative and relevant 'language games' in learning are not recognised within the design of statutory curricula. It is suggested that English education policy-makers now engage with Friedman Hansen's (1982) challenge to resolve the 'transmission/ decoding problem' in earnest, in a considered attempt to develop a more balanced teaching and learning environment for the developing 'storying animal'.

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